DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000171 Address: 333 Burma Road **Date Inspected:** 17-May-2007

City: Oakland, CA 94607

OSM Arrival Time: 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1400 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Huang Wei **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** N/A

Note: The PQR was welded at fabrication shop on the SAW Gantry machine.

Summary of Items Observed:

The CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the welding qualification testing pertinent for the welding qualification record (PQR) HP200785 scheduled for this project. ZPMC, welder Han Chang Hou was observed by the QA Inspector performing welding operations following the preliminary welding procedure specification PWPS-B-T-2221-U-2 for the PQR identified as HP200785. Base metal was designated as A-709M-345 T2 (Heat # 710126N) and appeared to meet the fracture critical requirements. The root opening of the joint was approximately 16 mm. ZPMC followed AWS 5.13 Production procedure WPS using submerged arc welding (SAW) process in the flat (1G) position with the 4.8 mm diameter EH14 electrode. The QA Inspector randomly verified amperages, voltages, travel speeds, preheat and heat interpass temperatures. The QA inspector recorded welding parameters for a total of 7 passes. The QA inspector observed that the welding parameters taken by ZPMC QA inspectors Huang Wei and Zhang Xin Jin and American Bridge Flour (ABF) representative Song Wemin appeared to be accurate and in accordance with the contract documents. The QA inspector performed final visual examination to the test coupon after completion of the PQR HP200785. The QA inspector observed that the welds appeared to be in general compliance with the contract documents. The QA inspector assigned a lot # B71-028-07 on this date. The digital photograph below shows the PQR test coupon.

WELDING INSPECTION REPORT

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Summary of Conversations:

The QA inspector did not have any significant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer